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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/775,455 | 02/02/2001 | Yasuo Ishihara | 54399039 | 1570 |

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EXAMINER

NGUYEN, PHUNG

ART UNIT PAPER NUMBER

2632

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,455

Applicant(s)

ISHIHARA ET AL.

Examiner

Phung T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,9,11-14,17,18,21-28,32,34,37-39,42-45 and 48 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 5, 9, 11, 13, 14, 18, 21-28, 32, 34, 37-39, 42-45, and 48 is/are rejected.
7) ☒ Claim(s) 12 and 17 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5, 11, 13, 14, 18, 21-28, 34, 38, 39, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crook (U.S. Pat. 5,142,478) in view of Cooper (U.S. Pat. 4,316,252).

Regarding claim 5: Crook discloses computerized aircraft landing and takeoff system which comprises monitoring a plurality of parameters indicative of an unstabilized approach; assigning a risk of go-around value to each of said parameters; summing the assigned risk values (col. 1, lines 28-44). Crook teaches putting the aircraft into the go-around mode for another attempt at a landing if the landing is unsafe (col. 2, lines 64-68) but does not specifically disclose an alert signal when the summed values exceed a predetermined threshold amount (unsafe landing). However, Cooper discloses apparatus for detecting the position of an aircraft with respect to the runway comprising an alert signal if the landing is unsafe (col. 4, lines 28-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Cooper in the system of Crook because they both teach a device for determining the position of an aircraft with respect to a runway. The teaching of generating an alert signal when the landing is unsafe of Cooper would enhance the system of Crook by providing the pilot an indication as to what should be done to recover from a dangerous situation.

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Regarding claim 11: Crook teaches wherein the step of commanding an autopilot go-around maneuver (col. 2, lines 61-62, and col. 3, lines 23-32).

Regarding claim 13: All the claimed subject matter is already discussed in respect to claim 5 above. Crook inherently teaches the plurality of parameters including runway length (col. 2, lines 9-14).

Regarding claim 14: Crook teaches monitoring a deceleration required to stop the aircraft (col. 3, lines 3-22).

Regarding claim 18: Refer to claim 11 above.

Regarding claim 21: All the claimed subject matter is already discussed in respect to claim 5 above.

Regarding claim 22: Refer to claim 11 above.

Regarding claim 23: All the claimed subject matter is already discussed in respect to claim 5 above. Crook inherently teaches the plurality of parameters including runway length (col. 2, lines 9-14).

Regarding claim 24: Refer to claim 11 above.

Regarding claim 25: All the claimed subject matter is already discussed in respect to claims 21 and 22 above.

Regarding claim 26: Crook discloses an Enhanced Ground Proximity Warning computer (col. 2, lines 61-68).

Regarding claim 27: Cooper discloses the alert signal includes signal useful for driving a display (col. 4, lines 34-36).

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Regarding claim 28: Cooper discloses the alert signal includes an aural alert signal (col. 4, lines 34-36).

Regarding claim 34: Refer to claim 11 above.

Regarding claim 38: All the claimed subject matter is already discussed in respect to claim 13 above.

Regarding claim 39: Crook teaches a deceleration required to stop the aircraft (col. 2, line 68, and col. 3, lines 1-5).

Regarding claim 42: Refer to claim 26 above.

Regarding claim 43: Refer to claim 27 above.

Regarding claim 44: Refer to claim 28 above.

Regarding claim 45: Refer to claim 11 above.

3. Claims 9, 32, 37, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crook in view of Cooper and further in view of Muller et al. (U.S. Pat. 5,839,080).

Regarding claim 9: Crook and Cooper do not directly teach the step of monitoring a plurality of parameters includes the step of monitoring a position of the aircraft. However, the use of Global positioning system (GPS) to indicate the current position and projected flight path of the aircraft is old and well known in the art as taught by Muller et al. (col. 5, lines 26-39). Therefore, it would have been obvious to the skilled artisan to use the GPS of Muller et al. in the system of the combination so that the position of the aircraft is accurately monitored.

Regarding claim 32: Refer to claim 9 above.

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Regarding claim 37: Crook and Cooper do not show the parameters include terrain data. However, Muller et al. disclose the terrain database 24 to provide varying resolutions of terrain data as a function of the topography of the terrain (col. 6, lines 7-48). Therefore, it would have been obvious to one of ordinary skill in the art to employ the teaching of Muller et al. in the system of the combination in order to provide information relating to geographical areas such as mountainous areas and areas in the vicinity of an airport which is an advantage.

Regarding claim 48: Refer to claim 37 above.

Allowable Subject Matter

4. Claims 12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 5, 9, 11, 13, 14, 18, 21-28, 32, 34, 37-39, 42-45, and 48 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung Nguyen whose telephone number is 571-272-2968. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on 571-272-296. The fax phone number for this Group is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 571-272-2600.

Phung Nguyen



Date: July 29, 2005